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THE RATS OF OUR CITIES.

WHAT BECOMES OF THE CARCASSES OF RATS DYING NATURAL DEATHS?

By VICTOR G. HEISER, Surgeon, United States Public Health Service, Chief Quarantine Officer and
Director of Health for the Philippine Islands.

In connection with the rat destroying campaign which has been conducted in Manila during the past year a number of interesting considerations have presented themselves. As an explanation of the observed facts might be of value in exterminating rats in the future, the following brief report is made with the hope that a solution may result.

It has been estimated that in the average city there is at least one rat per inhabitant, but granting that there is only one rat for every two inhabitants, or even less, the fact still remains that there must be at least a certain rat mortality from natural causes each day or month. The average life of a rat is said to be approximately 5 years. In round numbers the population of Manila is about 300,000 persons. Estimating, then, for instance, that there is only one rat for every two persons this would mean a mortality of 150,000 rats each 5 years, or 30,000 per year, or 2,500 rats per month, or an average daily mortality of about 82 rats.

There is a thorough daily collection of garbage, refuse, and street sweepings in the city of Manila, and this combined material is hauled to the public crematory. There is practically no other way in the city of Manila to dispose of refuse or other discarded material. Stoves are practically unknown, and on account of the high price of fuel, fires are of the most primitive nature and could not readily be used for burning so large an object as a rat, so that from the foregoing it is evident that if rats dying of natural causes were found, at least a great proportion of them would be placed in the garbage or refuse can, or be found in the street sweepings. The employees of the crematory have repeatedly reported during the past year that they seldom find any rats during the process of dumping the contents of the containers into the furnaces.

In order further to test this statement a regular sanitary inspector of the bureau of health was stationed in the crematory for a period of one month, and so far as practical he saw the contents of each can or receptacle dumped, and during the entire month he found only one dead rat.

It is quite possible, of course, that a certain percentage of rats die in inaccessible places, but owing to the rapid decomposition which takes place in a tropical climate the odors which arise soon attract attention. The records of the bureau of health show that comparatively few nuisances of this kind are discovered each month.

As further evidence that no considerable number of rats die in out-of-the-way places, it has been the experience of the gangs of rat destroyers, amounting to over 300 men, seldom to find a dead rat that has not died of poison placed for it or from some other readily explainable cause. These rat gangs clean block after block of houses and yards in the most systematic and thorough manner. They start first by moving everything in the houses, opening boxes, barrels, etc., in which rats might harbor, and then gradually work their way to the yard until everything is examined. All dirt, filth, straw, etc., is moved and burned; boxes are moved about, woodpiles are taken down and repiled. Live rats are frequently encountered in these operations and are promptly killed by means of dogs or clubs. Many hundreds of city blocks have been cleaned and recleaned in this way, and yet it is a most exceptional occurrence to find a dead rat.

The question now is, What becomes of these 2,500 rats that are presumably dying in Manila each month from natural causes? It has been suggested that perhaps they die in the sewers, but it is not very probable that any considerable numbers die there because the sanitary sewer system is a closed one and on account of the fact that it is used for sanitary fixtures only it would be impossible for a rat to gain access to the sewer. The great majority of the storm sewers are flushed at least once and sometimes twice each day by the high tide and the many observations made of the sewer outlets do not show the presence of dead rats. It is thought perhaps that the dead rats may have been eaten by other rats, but it may be urged against this contention that it is very rare to find any carcasses of partly eaten rats or parts of skeletons of rats.

From the foregoing it appears that at least many hundreds of rats disappear each month in Manila by natural means, the exact nature of which is not known, but if it could be discovered the knowledge might be useful in the destruction of rats.